

**SUGARCANE / BIOMASS BASED SOLAR THERMAL HYBRID
TECHNOLOGY FOR ENERGY INDEPENDENCE**

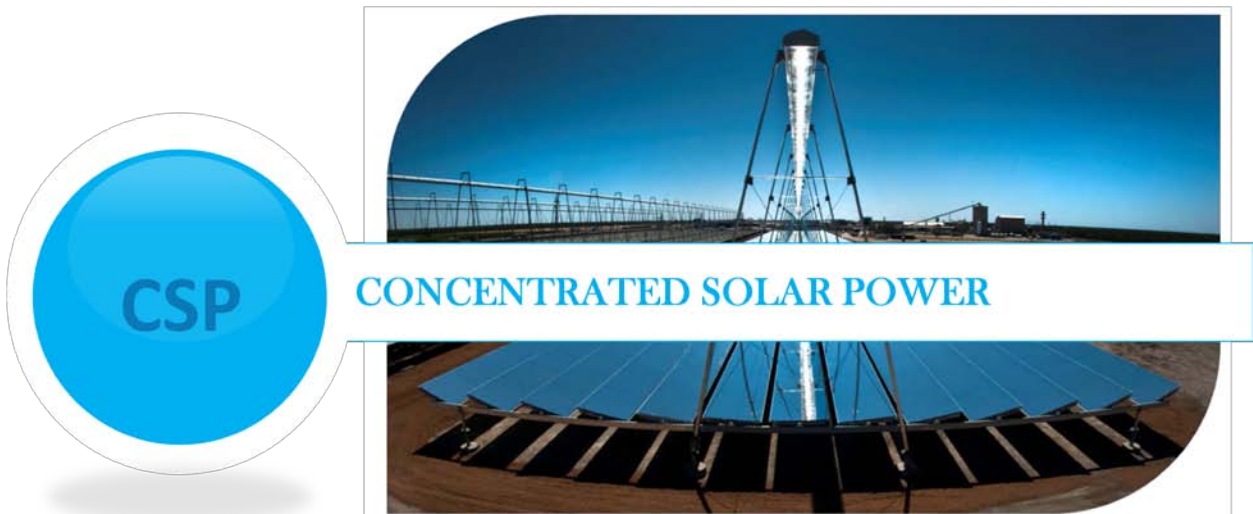
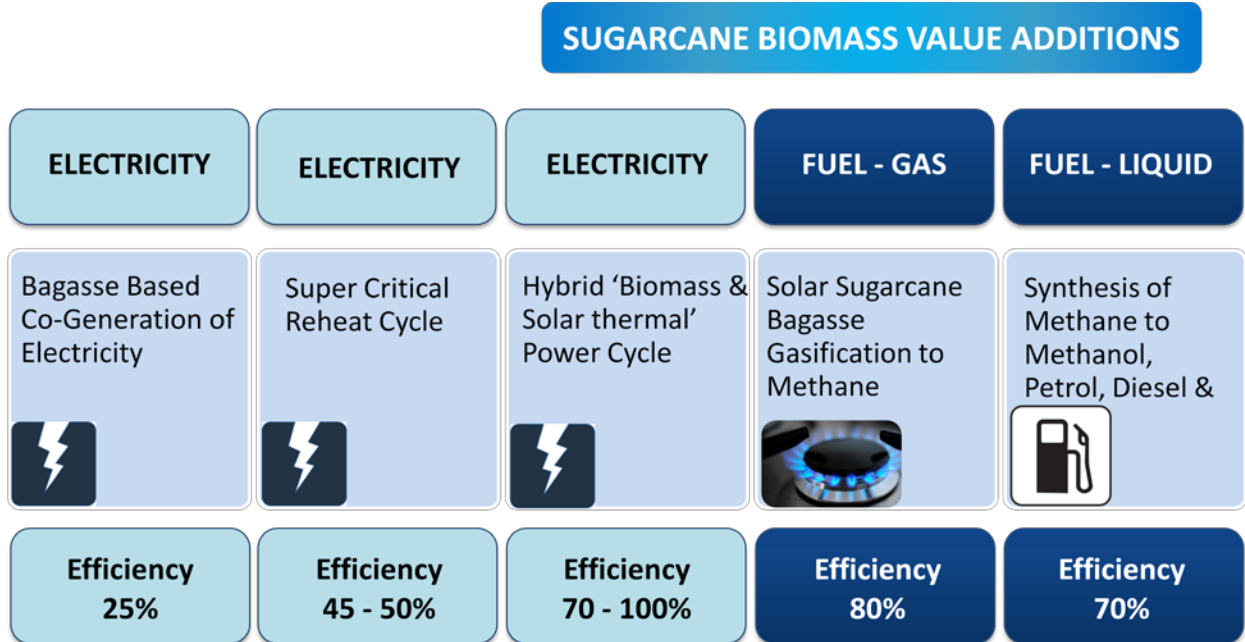
SUSTAINABLE ENVIRONMENT DEVELOPMENT IN VILLAGES

By

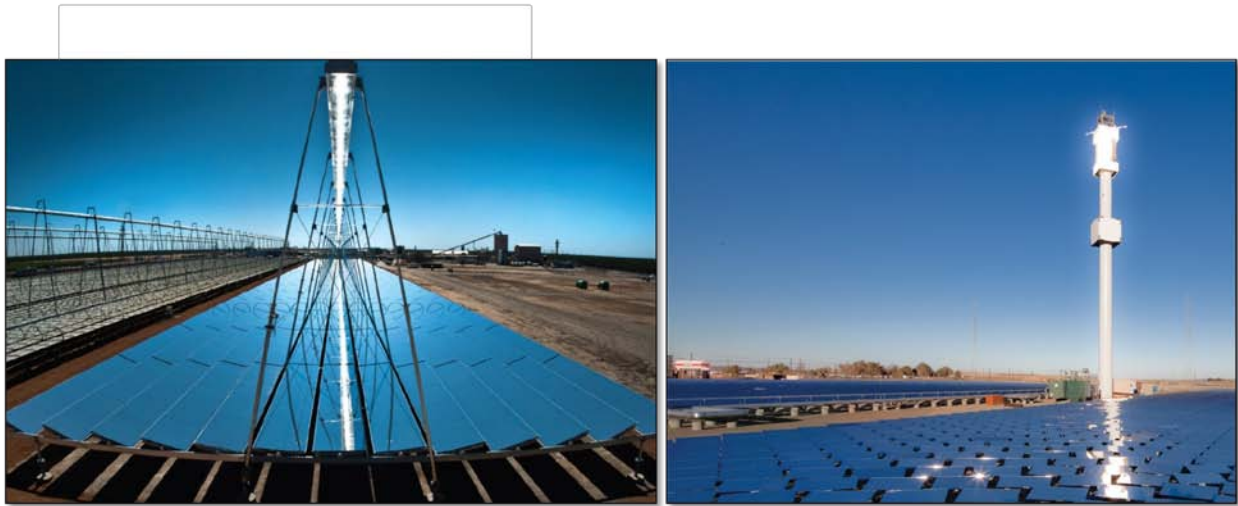
Vivek Verma

MISSION

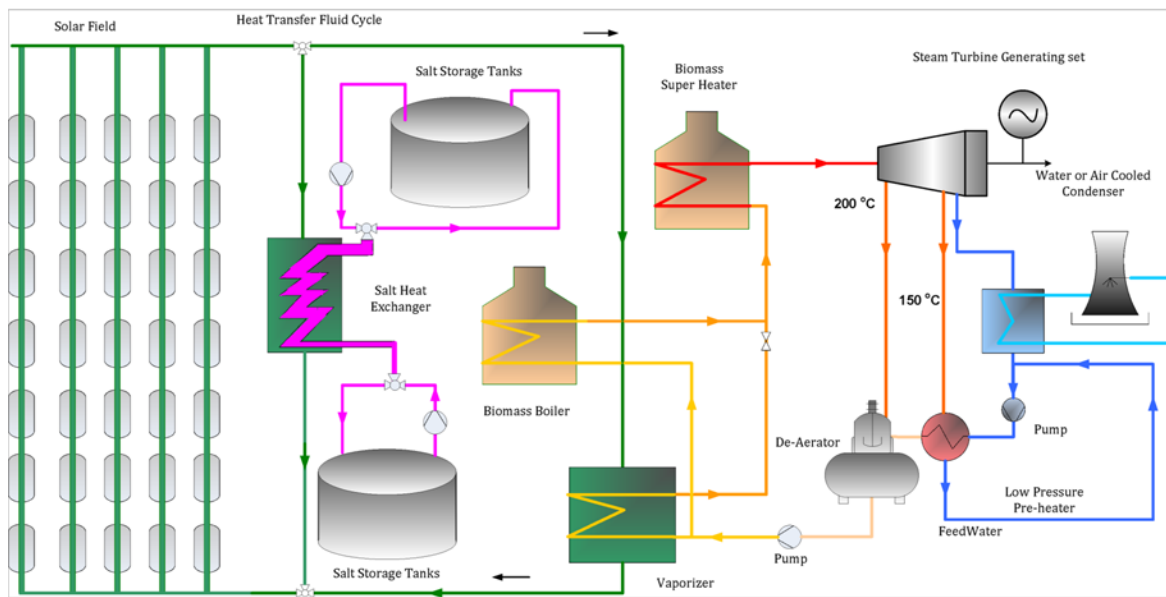
Dedicated for Sustainable Environment Development to Unlock Perpetual Food and Energy Resources by Encouraging Innovation with Excellence.



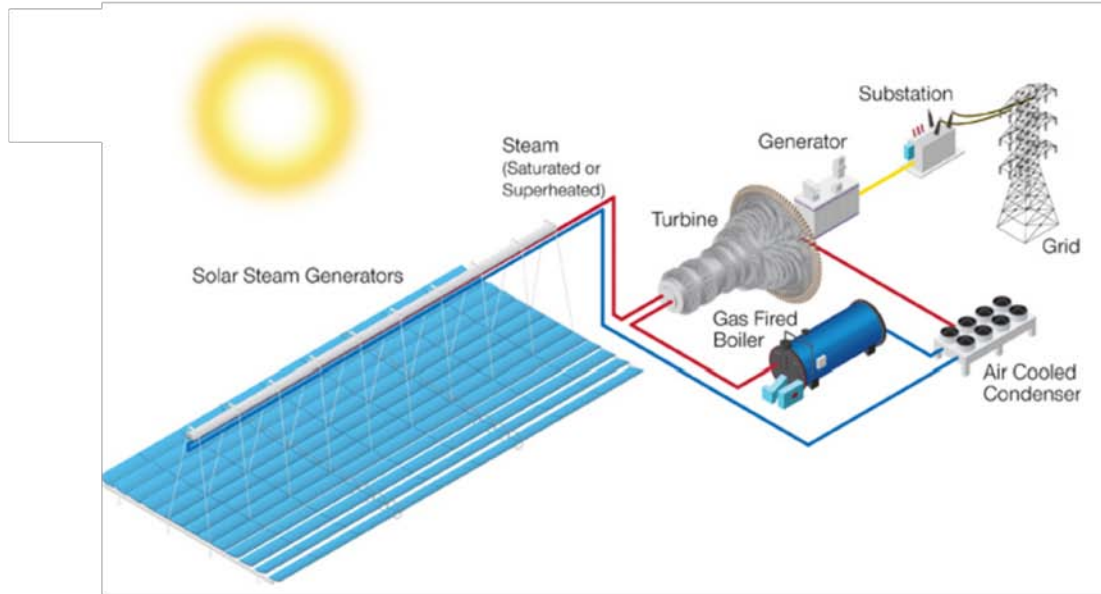
CONCENTRATED SOLAR POWER



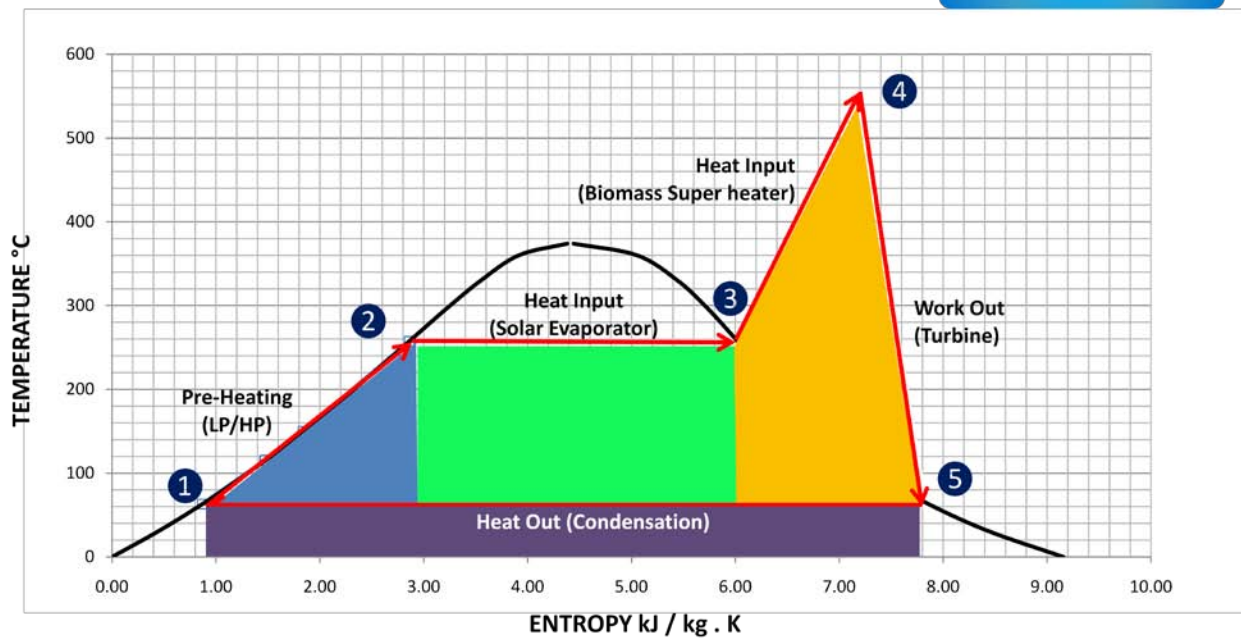
CONCENTRATED SOLAR POWER



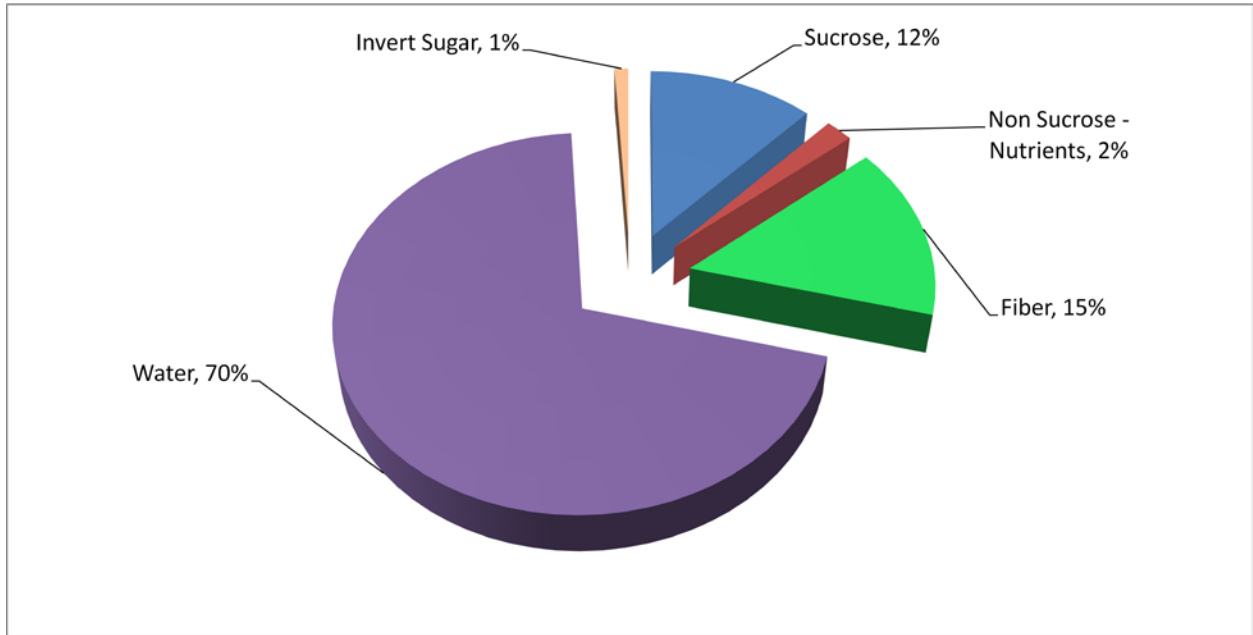
CONCENTRATED SOLAR POWER



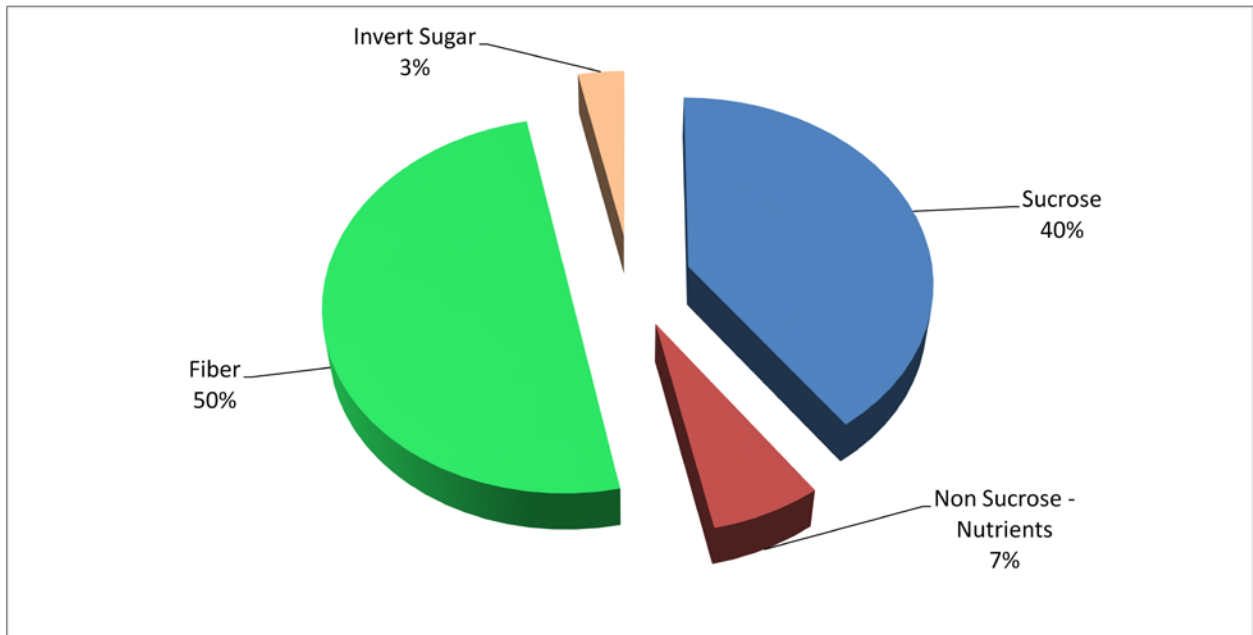
T-S DIAGRAM



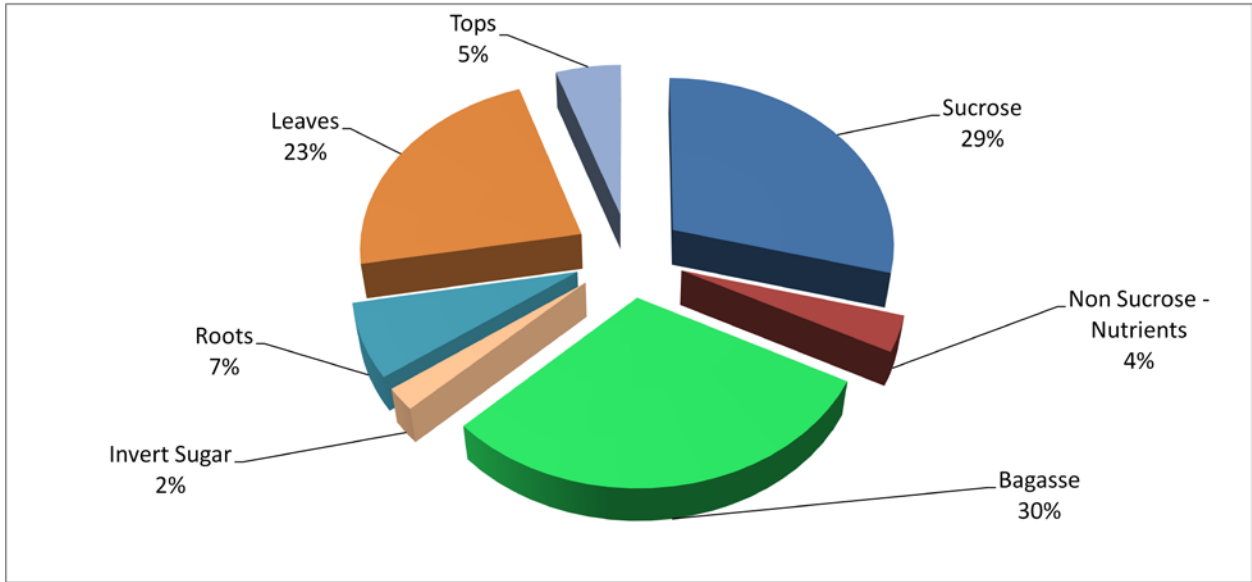
SUGARCANE MASS COMPOSITION



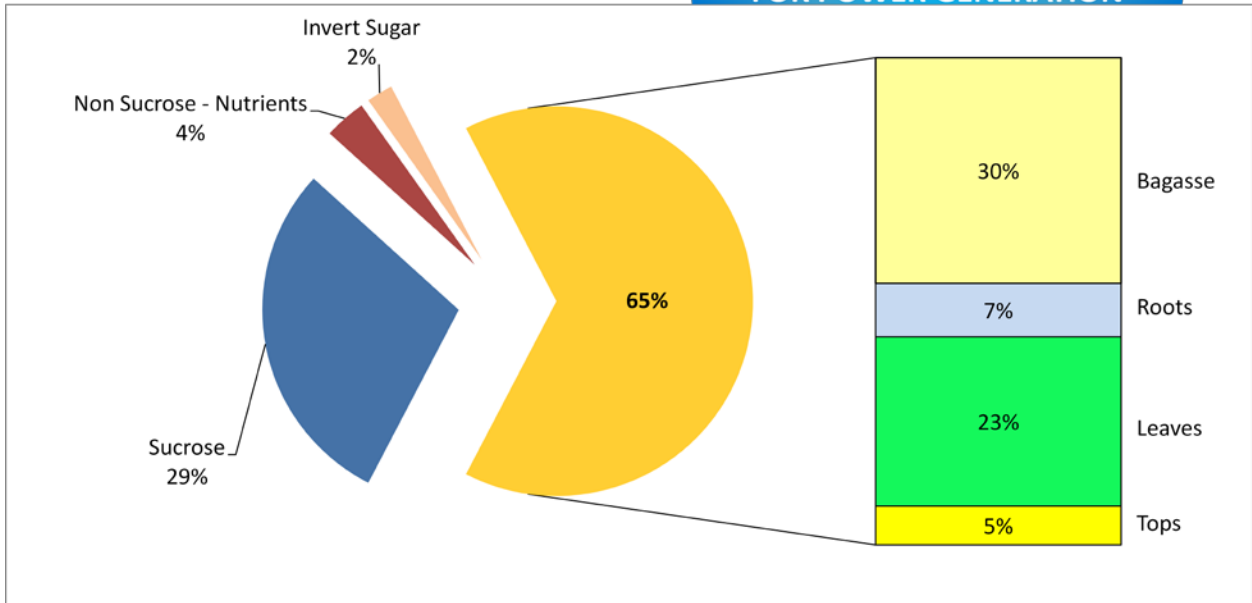
SUGARCANE DRY BIOMASS COMPOSITION



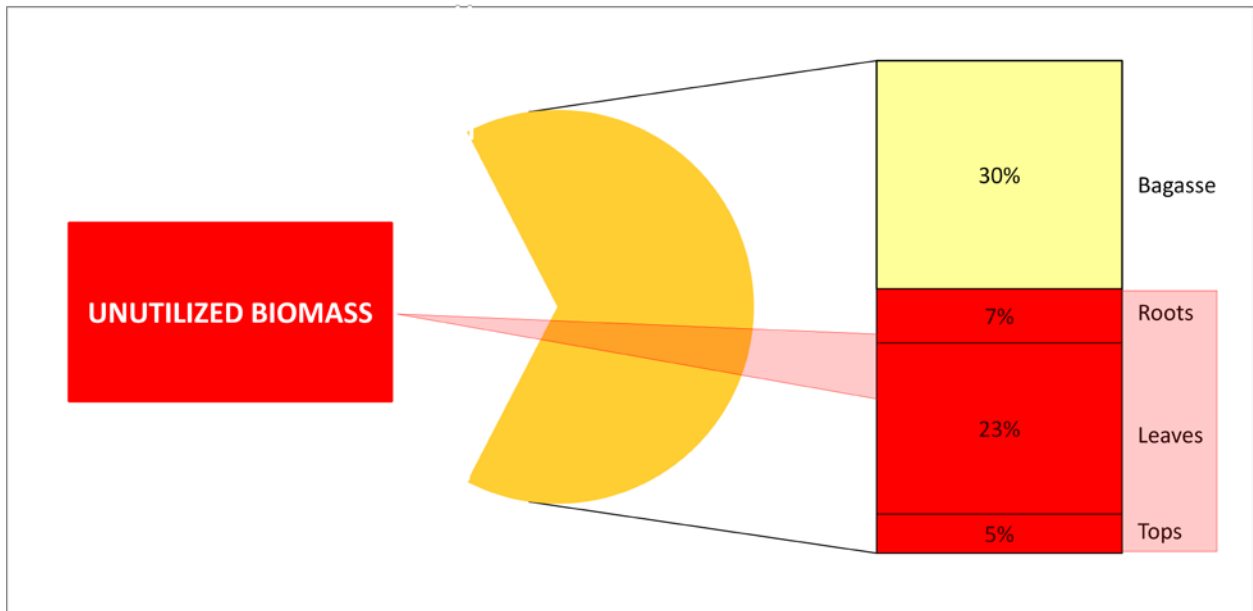
SUGARCANE DRY BIOMASS COMPOSITION



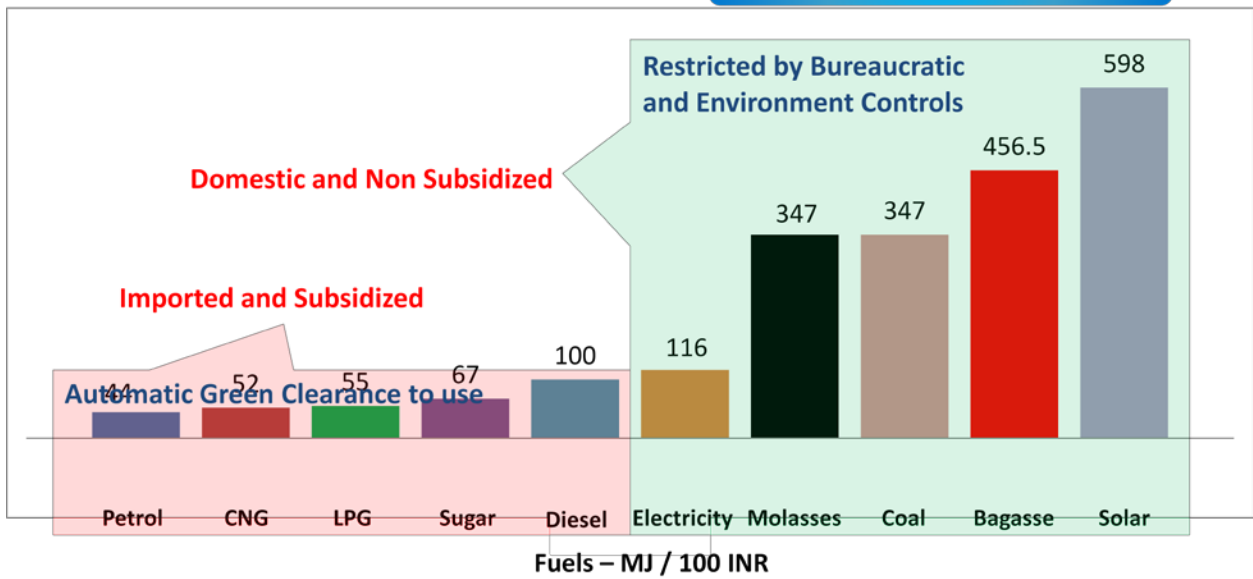
TOTAL BIOMASS AVAILABLE FOR POWER GENERATION



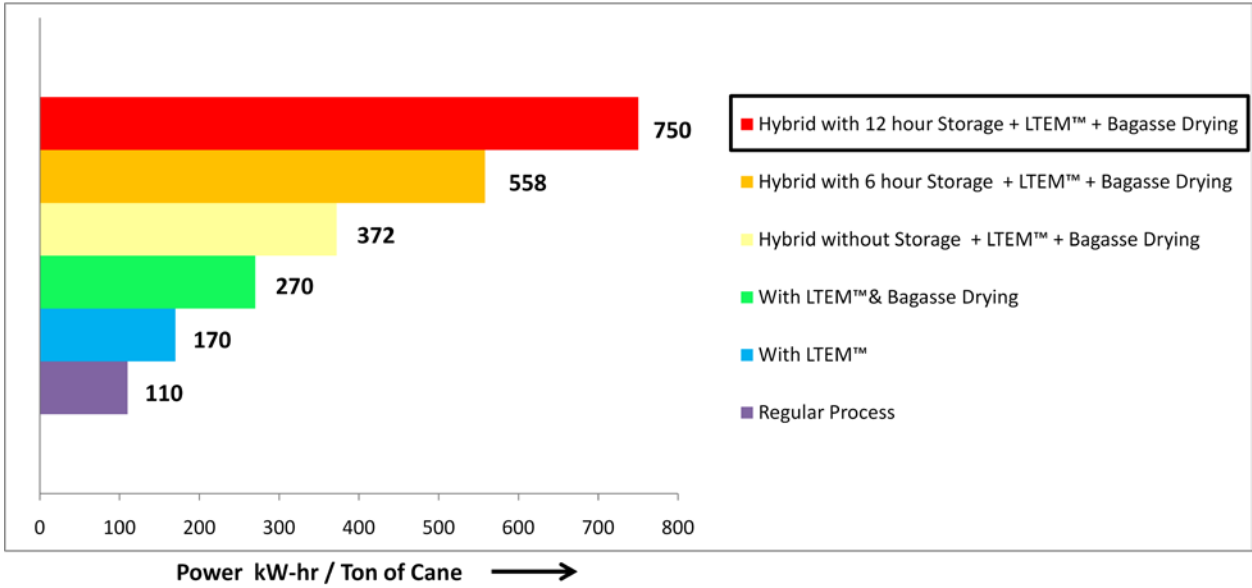
UNUTILIZED BIOMASS



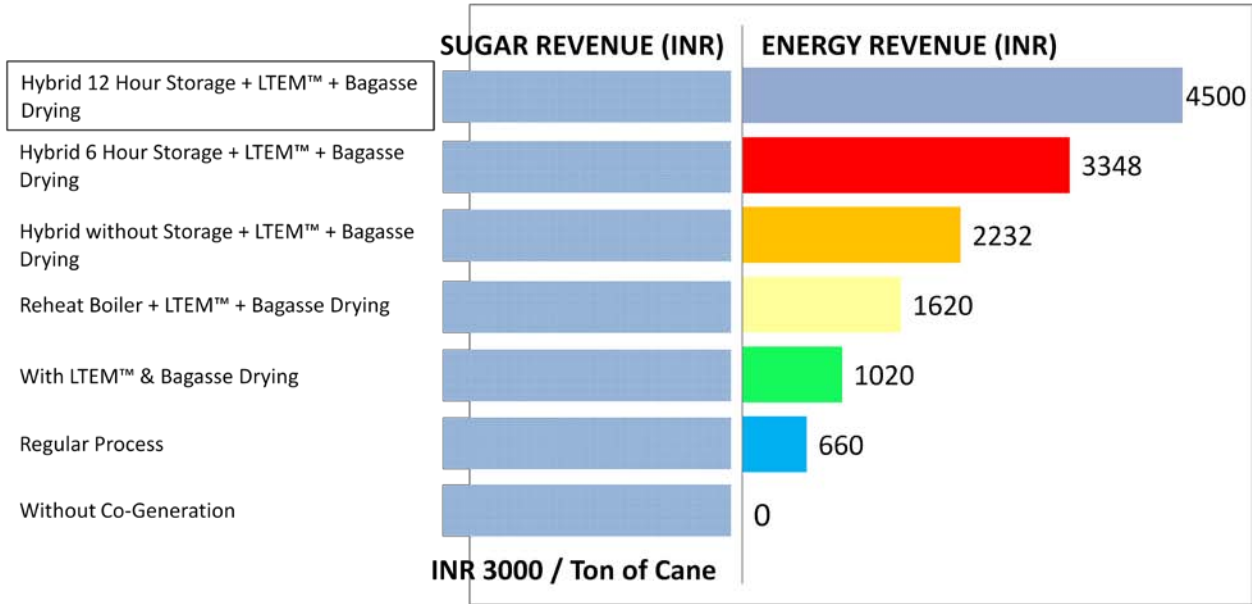
ENERGY VALUE: MJ / 100 INR



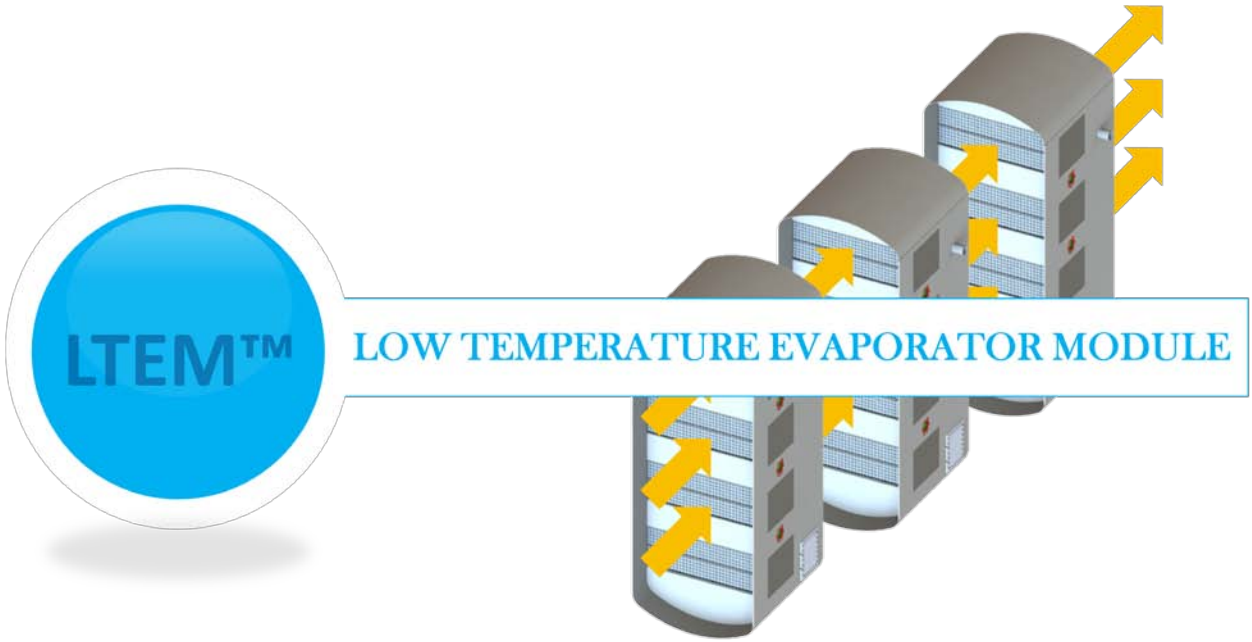
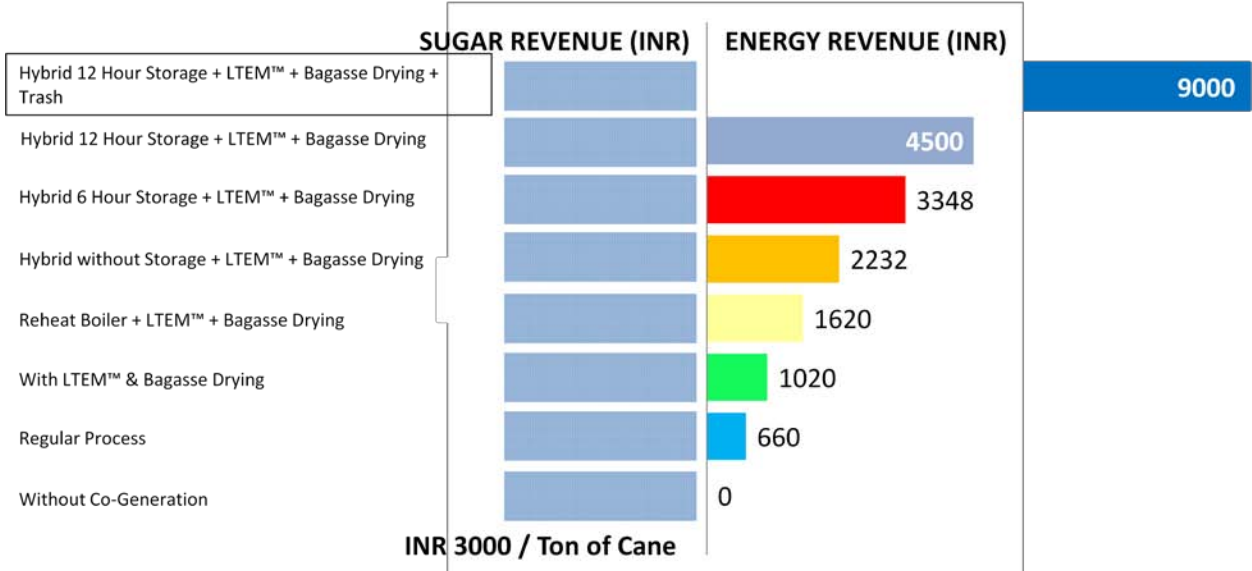
SUGARCANE VALUE OPTIONS



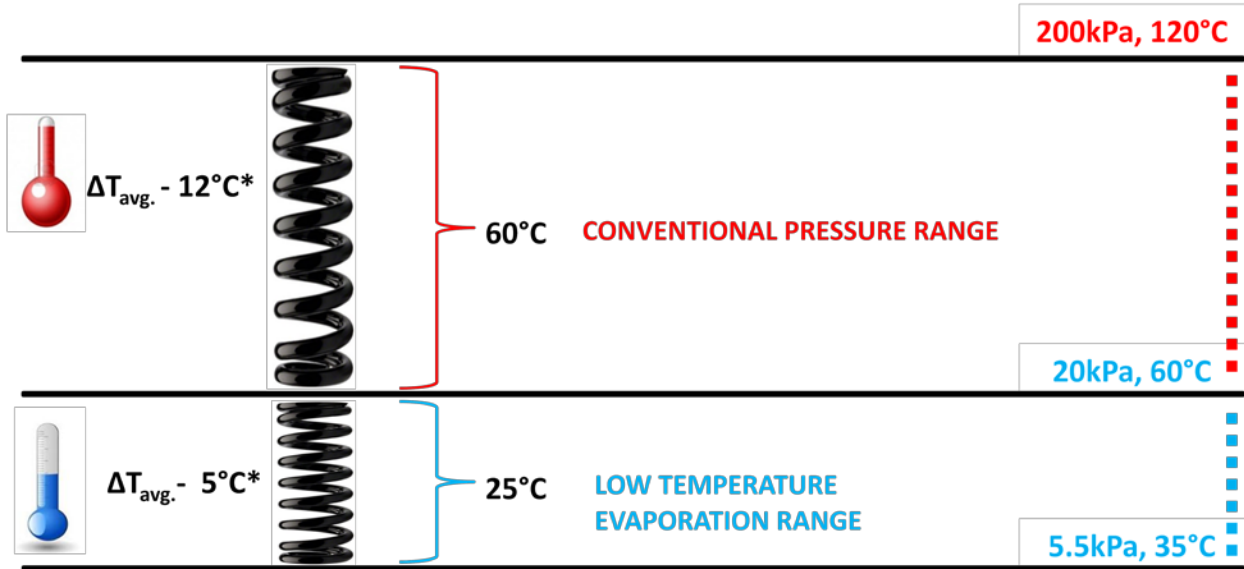
SUGARCANE VALUE OPTIONS



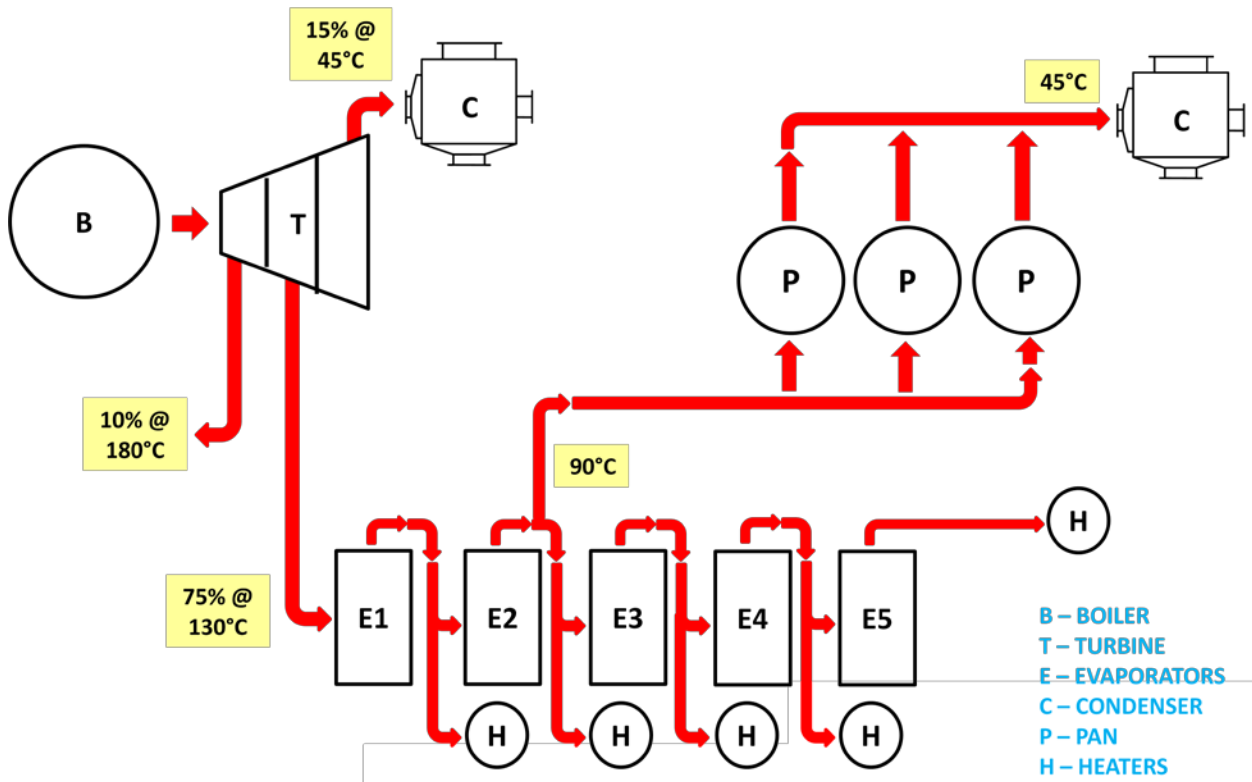
SUGARCANE VALUE OPTIONS

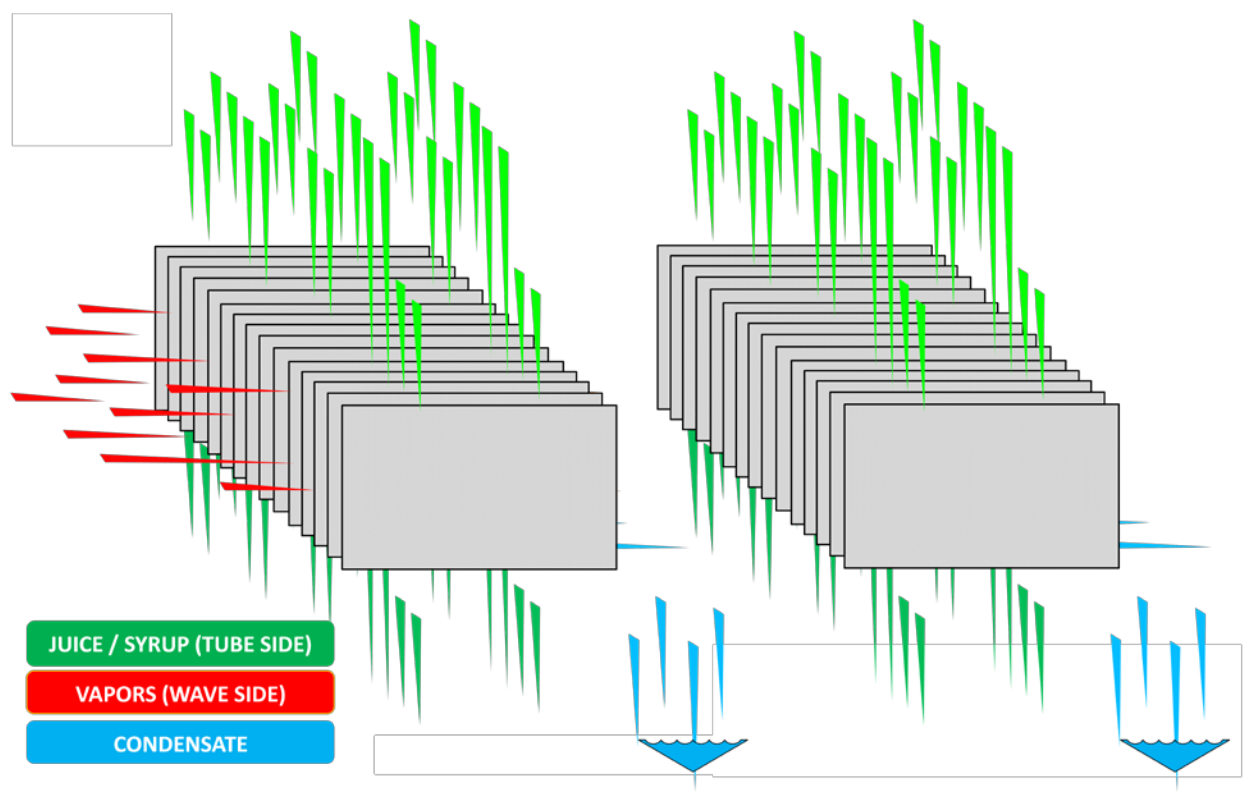
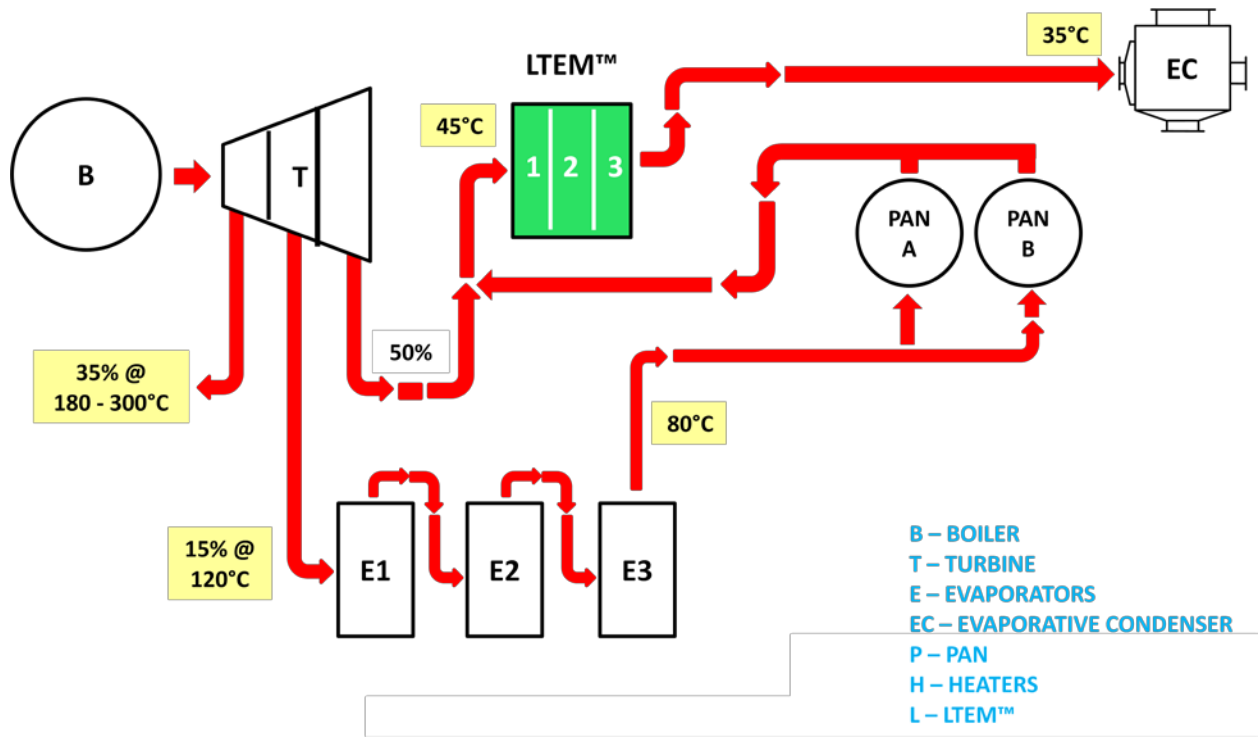


WHY LOW TEMPERATURE EVAPORATION?



* Temperature differences for five effects of Multi Effect Evaporator



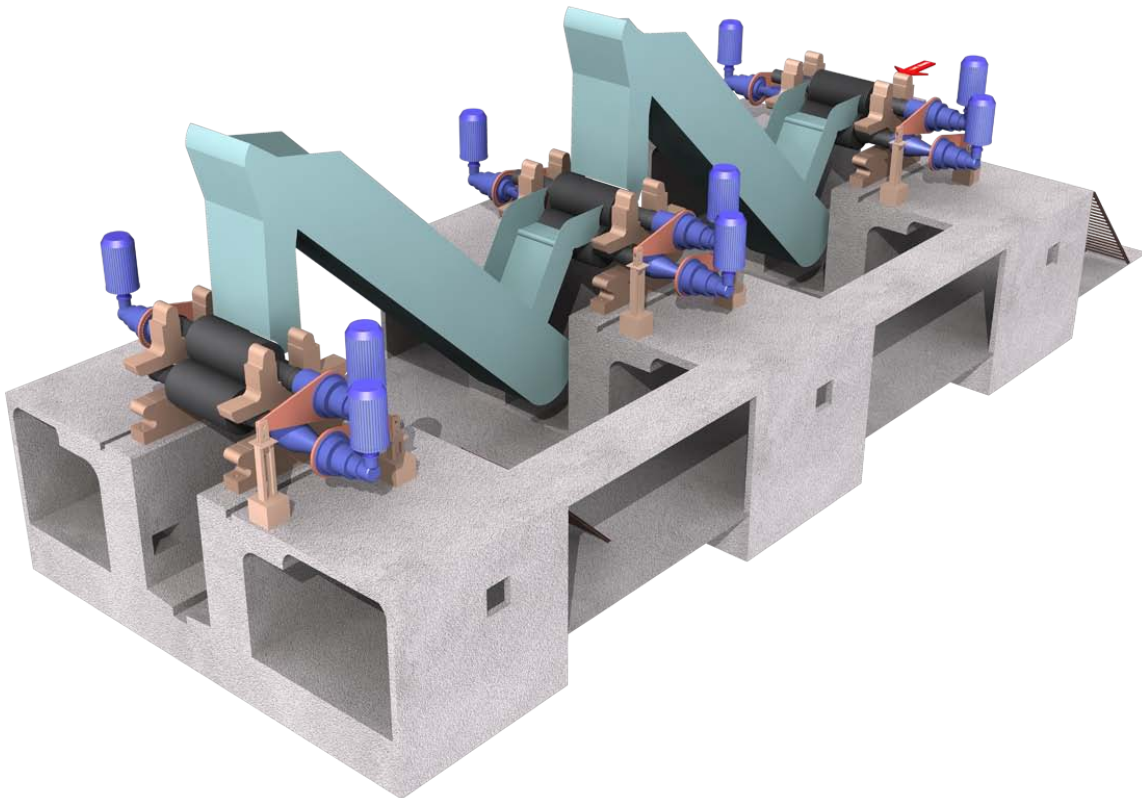


SHAFT MOUNTED PLANETARY DRIVES

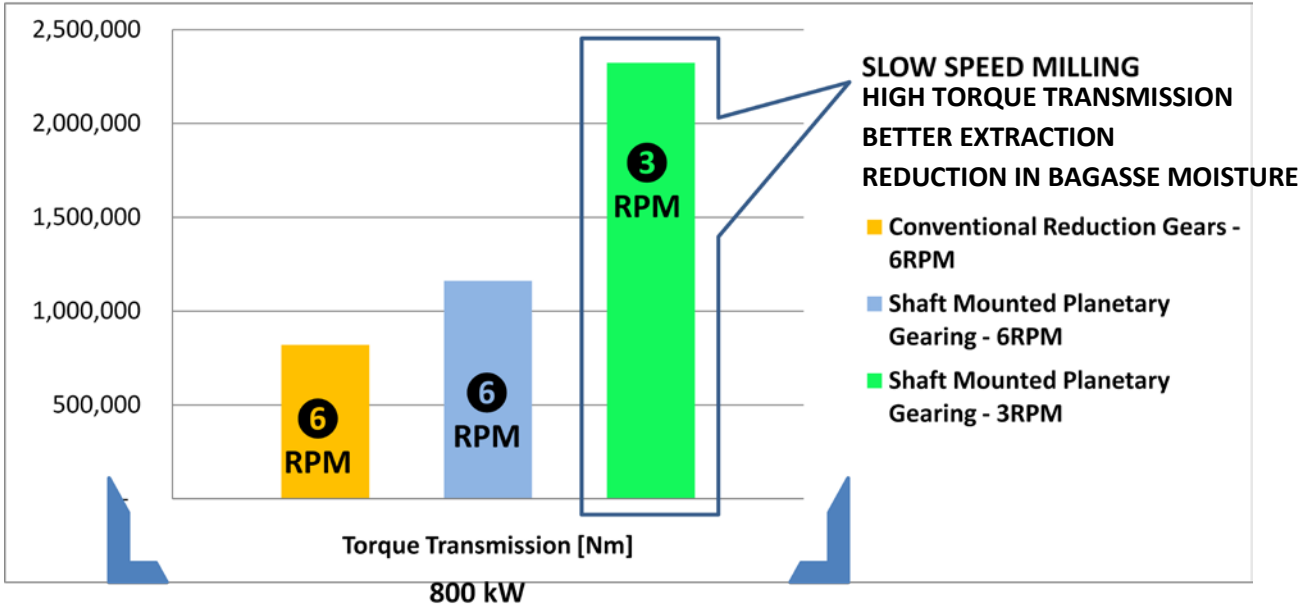


42" x 84", 4 ROLL MILL: JAY MAHESH SUGAR, INDIA

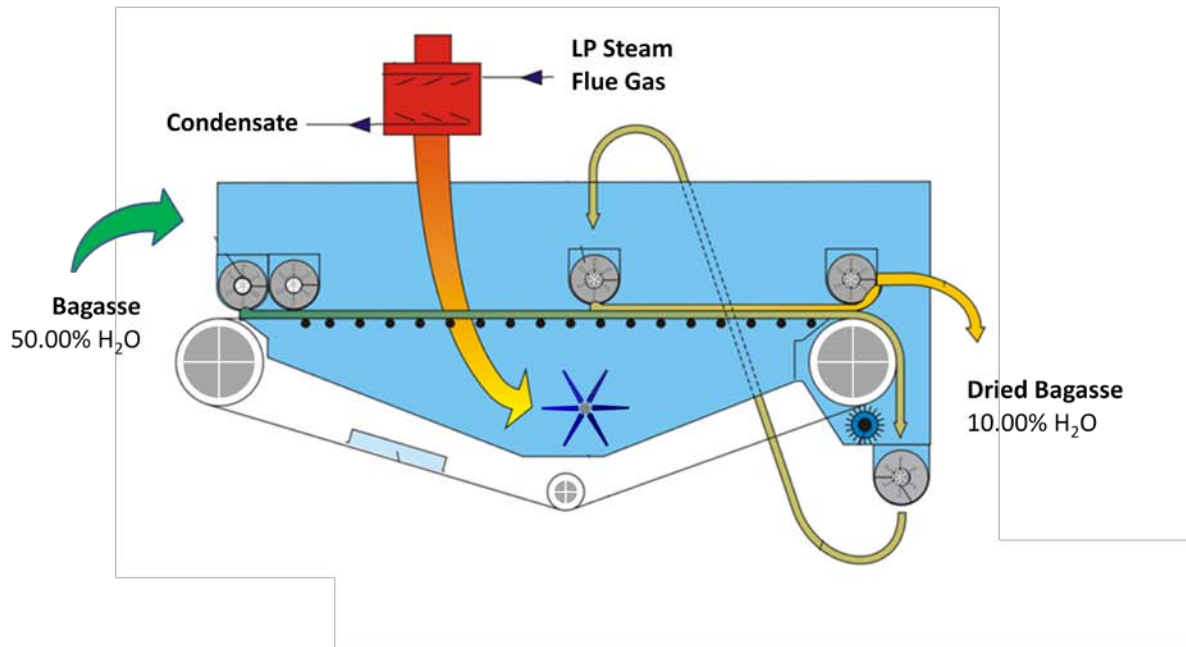
Ref: "Innovative Energy Efficient Milling Train"
Paper presented at: XXVIII Congress of International
Society of Sugar Cane Technologists, Sao Paulo
(Brazil), 23rd to 27th June, 2013.



POWER / TORQUE TRANSMISSION



LOW TEMPERATURE BAGASSE DRYER



LOW TEMPERATURE BELT DRYER



CONCLUSION

- Solar Thermal Hybrid** Power Plants can replace all forms of Fossil Fuels based energy resources.
- Energy and food production** in scarcely populated rural areas of the country **will bring economic equality** and prosperity.
- Forex spared from fuel import will be available for infrastructure development which will automatically reinforce the economy **and eliminate poverty.**

ENERGY SOURCED FROM VILLAGES

We can adopt Hybrid Biomass & Solar Thermal Power and Fuel Generation Technology to generate its entire energy from villages and bring global competitiveness and achieve energy independence utilizing surplus Biomass

**THANKS FOR YOUR VALUABLE TIME
TO UNDERSTAND OUR PROPOSALS**